E-tivity 6.2: Measurement and recognition of equity &cash settled share-based payment transactions

Question 1 (a) INES Ltd buys some inventory on 1 January 2017 for $100,000, but instead of settling in cash it pays for the inventory by issuing 10,000 $1 shares to the supplier on 31 January 2017. You are to **show the entry** to be passed in the books of INES Ltd.

(b) INES Ltd awards 1,000 shares to its top sales team at the end of the year. The shares have a nominal value (par value) of $1 and a market value of $5 each. **Required:** Journal entries.

(c) A company issued share options on 1 June 2016 to pay for the purchase of inventory. The value of the inventory on 1 June 2016 was $6m and this value was unchanged up to the date of sale. The shares issued have a market value of $6.3m.

Required: Show how this transaction will be dealt with in the financial statements.

Question 2: A company issues fully paid shares to 500 employees on 31 July 2018. Shares issued to employees normally have vesting conditions attached to them and vest over a three-year period, at the end of which the employees have to be in the company's employment. These shares have been given to the employees because of the performance of the company during the year. The shares have a market value of $2m on 31 July 2018 and an average fair value for the year of $3m. It is anticipated that in three years' time there will be 400 employees at the company.

Required: Show how this transaction will be dealt with in the financial statements.

Question 4: On 1 January 2013 an entity grants 250 share options to each of its 200 employees. The only condition attached to the grant is that the employees should continue to work for the entity until 31 December 2016. Five employees leave during the year. The market price of each option was $12 at 1 January 2013 and $15 at 31 December 2013.

Required: Show how this transaction will be reflected in the financial statements for the year ended 31 December 2013.

Question 5: A company grants 1,000 share options to each of 200 employees. Each grant is conditional on the employees working for at least three years for the company. The value of the options at the grant date is estimated at $12 per option, using an option pricing model.

Year 1: The company estimates that 20% of the employees will leave within three years and so will lose their right to their options. During Year 1, 13 employees leave the company, and the estimate that 20% will leave within three years is not changed.

Year 2: During Year 2, another 12 employees leave, and the company does not change its estimate that 20% will leave within three years.

Year 3: At the end of Year 3, a total of 40 employees have left the company, and the remaining 160 receive the right to exercise their share options.

Required: Calculate the remuneration expense that will be recognised in respect of the share-based payment transaction for each of the three years.

Question 6: AZIZI Ltd has set up an employee option scheme to motivate its sales team of ten key sales people. Each sales person was offered 1 million options exercisable at $0.10, conditional upon the employee remaining with the company during the vesting period of 5 years. The options are then exercisable three weeks after the end of the vesting period.

This is year two of the scheme. At the end of year one, two sales people suggested that they would be leaving the company during the second year. However, although one did leave, the other recommitted to the company and the scheme. The other employees have always been committed to the scheme and stated their intention to stay with the company during the 5 years.

Relevant market values are as follows:

Date	Share price	Option price
Grant date	\$0.10	\$0.20
End of Year One	\$0.24	\$0.38
End of Year Two	\$0.21	\$0.33

The option price is the market price of an equivalent marketable option on the relevant date.

Required: Show the effect of the scheme on the financial statements of AZIZI Ltd for Year Two.

Question 7: A company grants 1,000 share options to each of 200 employees. Each grant is conditional on the employees working for at least three years for the company. The value of the options at the grant date is estimated at \$12 per option, using an option pricing model. Initially, the company expects that 20% of these employees will leave before the end of the three years.

Year 1: During Year 1, 18 employees leave the company, and it revises the estimates of the number of employees who will leave from 20% to 25%. The current value of the share options is now \$14.

Year 2: During Year 2, 5 more employees leave the company, and the company revises its estimate of the number of employees who will leave from 25% to 15%.

Year 3: At the end of Year 3, a total of 38 employees have left the company, and the remaining 162 receive the right to exercise their share options.

Required: Calculate the remuneration expense that will be recognised in respect of the share-based payment transaction for each of the three years.

Question 8: On 1 January 2011 an entity grants 100 share options to each of its 400 employees. Each grant is conditional upon the employee working for the entity until 31 December 2013. The fair value of each share option is \$20. During 2011, 20 employees leave and the entity estimates that 20% of the employees will leave during the three-year period. During 2012 a further 25 employees leave and the entity now estimates that 25% of its employees will leave during the three-year period. During 2013 a further 10 employees leave.

Required: Calculate the remuneration expense that will be recognised in respect of the share-based payment transaction for each of the three years ended 31 December 2013.

Question 9: On 1 January 2018, a company which prepares accounts to 31 December grants 5,000 share options each to twelve of its senior employees. The fair value of one share option at 1 January 2018 is £9. The specified vesting date is 31 December 2020 and the grant is

conditional upon the achievement of certain performance targets by that date.
On 31 December 2018, it is estimated that all twelve of the employees will achieve their performance targets by the vesting date. However, by 31 Dec. 2019 this estimate has fallen to eleven employees and in fact only ten of the employees actually achieve their targets by 31 December 2020.
Required: Show how these transactions should be treated in the company's financial statements.
Question 10: At the beginning of year 1, an entity grants 1 share options to each of its 500 employees over a vesting period of 3 years at a fair value of $15
Year 1, 40 leave, further 70 expected to leave;
Share options now repriced (as market value of shares has fallen) as the Fair Value of the options had fallen to $5. After the repricing they are now worth $8. The modification has therefore increased the Fair Value from $5 to $8.
Year 2, 35 leave, further 30 expected to leave
Year 3, 28 leave
Required: Account for the above share options

Question 11: Jay, a public limited company, has granted 300 share appreciation rights to each of its 500 employees on 1 August 2015. The management feels that as at 31 July 2016, the year-end of Jay, 80% of the awards will vest on 31 July 2017. The fair value of each share appreciation right on 31 July 2016 is $15. You are **required** to **s**how how this transaction will be dealt with in the financial statements for the year ended 31 July 2016.

Question 12: Entity X grants 100 cash-settled share appreciation rights (SARs) to each of its 500 employees. The grant is conditional on the employee working for Entity X for the next three years. The company must settle in cash, which means that each time the share price rises the cost to the company of issuing the rights increases.
By the end of year 1, 400 employees are expected to stay for three years and collect their rights. Over the year, the company's share price has increased by $9.
By the end of year 2, 410 employees are expected to stay until the rights vest. The fair value of a right is now $11.
Required: Account these transactions in the financial statements.

Question 13: On 1 January 2011 an entity grants 100 cash share appreciation rights (SARS) to each of its 500 employees, on condition that the employees continue to work for the entity until 31 Dec. 2013. *During* 2011, 35 employees leave. The entity estimates that a further 60 will leave during 2012& 2013. *During* 2012, 40 employees leave and the entity estimates that a further 25 will leave during 2013. During 2013, 22 employees leave. *At 31 December 2013*, 150 employees exercise their SARs. Another 140 employees exercise their SARs at 31 December 2014 and the remaining 113 employees exercise their SARs at the end of 2015. The fair values of the SARs for each year in which a liability exists are shown below, together with the intrinsic values at the dates of exercise.

Year	Fair value $	Intrinsic value $
2011	14.40	
2012	15.50	
2013	18.20	15.00
2014	21.40	20.00
2015		25.00

Required: Calculate the amount to be recognised in the profit or loss for each of the five years ended 31 December 2015 and the liability to be recognised in the statement of financial position at 31 December for each of the five years.